Claims

I claim:

1. A shaft comprising:

an outer member having an inner surface describing a bore;

an inertial member disposed within the bore and having an outer surface; and

a resilient member compressed between the outer member inner surface and the inertial member outer surface for damping a shaft vibration.

2. The shaft as in claim 1 further comprising:

a relief in the inertial member outer surface for mechanically engaging the resilient member.

3. The shaft as in claim 2, wherein the resilient member is compressed in a range of 5% to 50% of an uncompressed thickness between the inner surface and the outer surface.

4. The shaft as in claim 2, wherein the inertial member damps a bending vibration.

5. The shaft as in claim 1, wherein the inertial member further comprises a groove extending parallel to a shaft centerline.

6. The shaft as in claim 1 further comprising;

a plurality of inertial members engaged with a plurality of resilient members.

7. A shaft damper comprising:

an inertial member having an outer surface;

a resilient member engaged with the outer surface; and

the resilient member having a resilient member outer surface for engaging a shaft bore surface.

8. The shaft damper as in claim 7 further comprising:

a profile in the inertial member outer surface for mechanically engaging the resilient member.

9. The shaft damper as in claim 7, wherein the inertial member profile further comprises a groove extending parallel to an inertial mass centerline.